

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER

TO: DIRECTORS, SINGLE FAMILY DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, HOUSING

Series and Series Number: (Supersedes
issued dated August 13, 1992)

MATERIALS RELEASE
NO. 1114c

ISSUE DATE September 6, 1996

REVIEW DATE September 6, 1998

SUBJECT: 1. Product "Diamond Wall" Stucco System

2. Name and Address of Manufacturer Omega Products, Inc.
P. O. Box 1889
Orange, CA 92668

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, approval or acceptance by HUD of the described product, and any statement or representation, however made, indicating such approval, endorsement or acceptance by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: A combination insulation and wall finish system for application to exterior walls.

DESCRIPTION:

The "Diamond Wall" system is a five component system which consists of a substrate, polystyrene insulation board, metal lath, fiber glass reinforced stucco exterior coating, and joint systems including caulks and sealants. The exterior coating is a minimum of 3/8" thick.

GENERAL CONDITION:

The "Diamond Wall" system shall be designed and built in accordance with Omega Products, Inc. specification and typical details except where modified by this Materials Release (MR). The system shall be installed by an applicator who is approved by Omega Products, Inc. The Diamond Wall system shall be in compliance with Table 1.

Omega Products, Inc. shall certify that the specified substrate is suitable for the application of the system. All joints shall be designed and constructed on the assumption that a leak can occur in the primary seal. A secondary seal or other defense against leaks shall be provided together with a built-in means of disposing of the leakage.

TABLE 1 Requirements for Diamond Wall Stucco System

<u>Material Requirements</u> (if used)	<u>Values</u>	<u>Product or Design Specification</u>
Fiber cement board or	compliance	ASTM C-1186
Gypsum Sheathing	compliance	ASTM C-79
Metal lath	compliance 1" x 20 ga. acceptable	FED QQ-L-101C
Polystyrene foam insulation board	compliance	UM 71a
Density, minimum	1.5 lbs/cu. ft.	
Thickness, minimum	1 inch	
Sand	compliance	ASTM C-144
Caulks and sealants, minimum	Type S Grade NS 20 year warranty	ASTM C-920
Portland cement	Type I, II-I, or II	ASTM C-150
Finish pigments	UV stable 2000 hrs no fading no yellowing ± 1 max. (ASTM D-1925)	ASTM G-26 Type A
Coating Thickness	3/8" minimum	ASTM C-140 Sec 7
Surface impact	no damage with 30 lb weight at 6 ft.	ASTM E-695

INSTALLATION:

1. The installation of the Diamond Wall stucco system shall be in accordance with the manufacturers installation instructions. The system shall be installed by applicators that have been approved by the manufacturer.
2. The Diamond Wall finish shall be delivered to the job site in packages with the name of the manufacturer, address, installation instructions, compliance to this MR and with a warranty statement.

3. The Diamond Wall finish is an acrylic co-polymer based material containing quartz and marble aggregate, and shall be applied at the rate of 4.5-6.0 gallons/100 sq. ft. The finish coating is composed of 80 lbs. of acrylic co-polymer material added to 4.5-6.0 gallons of water and 240 pounds of sand.
4. The substrate surface shall be determined by the manufacturer, to be free of release agents and other residues and in all other ways suitable for application of the system. The system shall only be applied to those substrates approved by the manufacturer.
5. No additives, or materials of any kind, such as binders, antifreeze agents, accelerators, fillers, etc. except specified amounts of clean water, shall be allowed unless specifically approved by the manufacturer.
6. The ambient temperature shall be 40° Fahrenheit or greater and rising at the time of application but not greater than 110° Fahrenheit and shall remain so for at least 24 hours thereafter. The manufacturer shall be responsible for making any disputed determinations.
7. The polystyrene board shall not be used in contact with chimneys or other surfaces which could heat the board to a temperature greater than 149° Fahrenheit. Provide clearance from heat sources in conformance with the National Fire Protection Association publication NFPA No. 89M.
8. The polystyrene insulation board shall be coated so that no portion is exposed. The requirements shall be carefully observed at the base of the insulation, around all doors and windows, around all wall penetrations for utilities and other wall penetrations or openings.
9. All areas where the system joins other materials or terminates shall be protected from moisture intrusion with a product or method specified by manufacturer. The surfaces to receive sealant and sealant prime coat shall cure a full, 14 to 21 days, prior to installation of sealant prime coat and sealant.
10. No sealant shall be applied to the system until it has previously cured 14 to 21 days. Backer rod may be installed to prevent water intrusion during curing.

11. All joints shall be made so that the caulking and sealing cements can be removed and replaced. The sealant and caulks shall have a 20 year performance warranty. It should be noted that the caulks and sealants have to be periodically replaced by the owner or as specified by the manufacturer depending on the conditions of caulks, sealants or adhesive.
12. The exterior cementitious coating shall be applied in one coat to a minimum 3/8 inch thickness. The metal lath shall be embedded in the coating. Fasteners for lath shall penetrate 1 inch minimum into wood studs. Flashing, corner reinforcement, and metal trim shall be installed as set forth by Omega Products, Inc. The stucco shall be applied at ambient temperature ranging from 40° to 110° Fahrenheit by applicators approved by Omega Products, Inc. Woven wire, 1 inch, 20 gauge galvanized stucco netting lath shall be applied tightly over substrate using 11 gauge galvanized roofing nails with 7/16 inch head spaced 6" on center or 16 gauge, galvanized staples spaced six inches on center with a minimum one inch penetration. Staples shall have a minimum crown width of 7/8 inch. Care shall be taken to avoid over-driving fasteners. Lath shall be applied with 1/2 inch end and side laps. Lath shall be pulled tight so the furring will be flush against the substrate.

WARRANTY:

Omega Products, Inc. shall warrant the Diamond Wall system for 20 years against faulty performance. The warranty shall include correction of delamination, chipping, peeling, blistering, flaking, and other serious deterioration of the system. Should any such defects occur, Omega Products, Inc. shall make a pro-rata allowance for replacement, or pay the owner the amount of the allowance. Omega Products, Inc. shall not be liable for damages or defects resulting from misuse, natural catastrophes (other than hail), casualty or other causes beyond the control of Omega Products, Inc.

The installation of the Diamond Wall system shall be in accordance with the Omega Products, Inc. application instructions and the plans and specifications approved by Omega Products, Inc. If Omega Products, Inc. finds that the installation deviates significantly from the application instructions and the approved plans and specification, Omega Products, Inc. shall notify the owner, HUD and the builder that the installation is not satisfactory.

A copy of the warranty shall be given to the owner and to the local HUD Office upon completion of the property.

This warranty does not relieve the builder, in any way, of his responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to special housing programs such as Low Rent Public Housing.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Manufactured Housing and Regulatory Functions, Manufactured Housing and Construction Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate user fees shall be sent to:

U. S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P. O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. The revision may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm,
and is not transferable to any person or successor entity.
